(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 16 June 2005 (16.06.2005)

PCT

(10) International Publication Number WO 2005/055128 A2

(51) International Patent Classification⁷: H04N 1/387, G06T 1/00 G06K 19/00,

(21) International Application Number:

PCT/JP2004/016908

(22) International Filing Date:

8 November 2004 (08.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2003-404365

3 December 2003 (03.12.2003) JP

- (71) Applicant (for all designated States except US): NISSAN MOTOR CO., LTD. [JP/JP]; 2, Takara-cho, Kana-gawa-ku, Yokohama-shi, Kanagawa 2210023 (JP).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): KAGAMI, Fumio.
- (74) Agents: MIYOSHI, Hidekazu et al.; Toranomon Kotohira Tower, 2-8, Toranomon 1-chome, Minato-ku, Tokyo 105-0001 (JP).

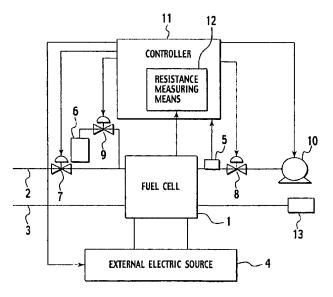
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: FUEL CELL SYSTEM



(57) Abstract: A fuel cell system and a method of operating a fuel cell system are disclosed wherein an external electric source (4) is provided to apply current to a fuel cell (1), comprised of a polymer electrolyte membrane-electrode catalyst complex having a polymer electrolyte membrane (21) sandwiched between a fuel electrode (24A) and an oxidant electrode (24B) and separators (26, 28) formed with flow channels (27, 29) to supply fuel and oxidant to the polymer electrolyte membrane-electrode catalyst complex, and operative to change a direction in which current is applied to the fuel cell (1).